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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER				
OBEID, MAMON A				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/627,919

Applicant(s)

BAKER, PAUL L.

Examiner

MAMON OBEID

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-11, 14-15, 18-19, 22-23, 25-29 and 31-33 is/are pending in the application.
- 4a) Of the above claim(s) 14, 15 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-11, 14-15, 18-19, 22-23, 25-27, 29 and 31-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Final Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Acknowledgements

1. This office action is in response to the communication filed December 17, 2008.
2. Applicant's election with traverse of Group II in the reply filed on December 17, 2008 is acknowledged. The traversal is on the ground(s) that Group I (claim 28) and Group II (claims 9- 11, 18- 23, 25- 27 and 29) do not require a separate search. However, this not found persuasive, a search would place a serious burden on the Examiner if the restriction was not made. Therefore, the requirement is still deemed proper and is therefore made FINAL.
3. Claims 14-15 and 28 are withdrawn from further consideration pursuant to 37 C.F.R. §1.142(b), as being drawn to a nonelected Group, there being no allowable generic or linking claim.
4. Claims 9- 11, 14- 15, 18-19, 22- 23, 25-29 and 31-33 are currently pending.
5. Claims 9- 11, 18-19, 22- 23, 25-27, 29 and 31-33 have been examined.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

7. Claims 9-11, 18-19, 22- 23, 25-27, 29 and 31-33 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 29 recites the limitation "the sentences". There is insufficient antecedent basis for this limitation in the claim. Does "the sentences" refer to the negotiation position, or does it refer to other sentences that are formulated by the broker (*e.g.* sentences in the basis-for-agreement). Appropriate correction is required.
- b. Claim 9 recites the limitation "wherein both parties never receive a copy of the opposite party's negotiation", which contradicts the limitation in claim (25) that recites "wherein the broker provides the parties with a copy of an encrypted basis-for-agreement". The "encrypted basis-for-agreement" has to include at least part of the negotiation positions of both parties, else there would be no way for both parties to come into agreement. Appropriate correction is required.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 8- 13, 17, 19-23, 25, 28 and 29 are rejected under 35 U.S.C. 103 (a) as being unpatentable over De Vries U.S. Patent Application Publication No. (2002/0184153 A1) ("De Vries") in view of Nagel et al. (U.S. Patent No. 7, 181, 017 B1), ("Nagel") and further in view of Fahlman et al. (U.S. Patent No. 5,960,080) ("Fahlman").

10. **As per claims 19, 22, 25, 29 and 31** : De Vries discloses:

- c. conducting a negotiation between two parties through a broker (§ [0007]);
- d. wherein each party receives from the broker a dictionary of words ("interests") for description of its negotiating positions (set of interests are predefined and broadcasted to users, § [0004]) , and a schema ("encoding module 235, 240 or 245") for descriptive statements in the negotiating position (§ [0044]) ;
- e. wherein the party who is selected to begin negotiation sends an encryption key to the other party (communication between parties is encrypted using a conventional key, § [0047]);
- f. wherein each party applies the encryption key to partially encrypt its negotiating position so that identical terms encrypt to identical values (§'s [0014], [0047] and [0060]);
- g. wherein each party sends its partially encrypted negotiating position to the broker (§ [0005]);
- h. wherein said broker does not possess the encryption key and is unable to decrypt the negotiating positions (§ [0005]),
- i. wherein, upon receiving both partially encrypted negotiation positions, the broker compares them to discover whether there exists an encrypted statement that is common with both negotiating positions (§ [0011]);

- j. wherein the broker notifies each party about a basis-for-agreement (in the case when there is shared or common interest, an audible or visual alert is provide to both parties (§ [0004]));
 - k. wherein the broker provides the parties with a copy of an encrypted basis-for- agreement ("matched interests") (matched interests are disclosed to both parties and non-matched interests are never disclosed (§s [0009], [0017], [0047])); and
 - l. wherein each party decodes the basis-for-agreement (§ [0047]) .
11. De Vries does not expressly disclose wherein said broker does not possess the encryption key and is unable to decrypt the negotiating positions and partial encryption.
12. However, Nagel discloses an intermediary, wherein the intermediary is unable to decrypt the communication or the user's private information (column 7, lines 3- 59); Nagel further discloses applying a "comprehension functions", cryptography and steganography, to only a portion of the information in the message (column 17, lines 3- 25).
13. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Devries teachings to include un-trusted broker/third-party ("intermediary") and partial encryption disclosed by Nagel to avoid the possibility of revealing the users' personal information either by insecure trusted intermediary or host or by simply unauthorized decryption of the information (De Vries, § [0007]) and (Nagel, (column 17, lines 3- 25)).

14. The combination De Vries/ Nagel does not specifically disclose encrypting nouns and adjectives while verbs and preposition are not encrypted. However, Fahlman clearly discloses a method for encrypting selected sensitive information (e.g. nouns) from a message, wherein the message is then transmitted to an untrusted service (e.g. third party or intermediary), wherein the untrusted service is unable to decode the encrypted sensitive information (column 4, lines 16- 46; column 5, line 4- column 6, line 15).

15. Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the combination's (De Vries/ Nagel) teachings to include the function of encrypting only the sensitive terms (e.g. person's name) in a message/ sentence to prevent the untrusted service or intermediary from discovering the sensitive terms of the message thereby ensuring confidentiality of the message (Fahlman: column 5, lines 33- 37; De Vries: ¶ [0007] and Nagel: column 17, lines 3- 25).

16. **As per claims 26 and 27:** De Vries further discloses wherein both parties use the one-way encryption key to derive a codebook from the dictionary (¶'s [0059], [0060]).

17. **As per claim 9:** De Vries further discloses wherein both parties never receive a copy of the opposite party's negotiating position (non matched interests are not disclosed, (¶ [0006], [0009])).

18. **As per claim 10:** De Vries further discloses wherein the broker allows a party to see a list of potential negotiation partners and the party has the opportunity to make a selection of negotiating partners (§ [0016]) .

19. **As per claim 11:** De Vries further discloses wherein each party may modify their negotiation position so that it is specific for each potential negotiating partner (§ [0016]) .

20. **As per claims 23:** Vries further discloses wherein data to be exchanged through the negotiation comprises intelligence data, price information, or intellectual property holdings (§ [0013]).

21. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination De Vries/ Nagel in view of Applicant's own Admission.

22. **As per claim 18:** The combination De Vries/ Nagel discloses all the limitations of claim 25 shown above. The combination does not disclose wherein the schema uses XML, XML-DTD, or BNF Grammar. However, Applicant admits that XML is old and well know in the art (see in Applicant's Patent Application Publication (§ [0018])). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the combination's teachings to include XML to allow users to create their own customized tags, enabling the definition, transmission, validation, and interpretation of data between applications and between organizations.

23. Claims 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over De Vries in view of Nagel and further in view of Fahlman and further in view of Snapp et al. (U.S. Patent No. 7, 302, 582 B2).

24. **As per claims 32 and 33:** De Vries discloses the limitations of claim 25 shown above, De Vries does not disclose concealing numerical values and value ranges in a partially encrypted negotiating position of a party by linear mapping of numerical values using a secret offset and secret scaling factor. However, Snapp discloses linear mapping of numerical values using $2n$ bits value (column 6, lines 33- 53). De Vries further does not disclose using the encryption key, encrypting the name of a named set of values as a number with $2n$ bits, separating the $2n$ bits into two numbers of n bits, and converting the two numbers of n bits to the offset and the scaling factor which are then applied to values in the value set. However, Snapp discloses a "32 bit sample" that is divided into two objects, the first object consists of the leftmost 3 bits and the remaining 29 bits constitute the second object, both objects are applied to the "bit array 110" (column 6, lines 33- 53). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the combination (De Vries/ Nagel/Fahlman) teachings to include linear mapping of numerical values to increase security measures of confidential information.

25. **Examiner's Note:** The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Response to Arguments

26. Applicant's arguments with respect to claim 25 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

27. Furthermore, suggestions or examples of claim language provided by the Examiner are just that—suggestions or examples—and do not constitute a formal requirement mandated by the Examiner. Unless stated otherwise by an express indication that a claim is “allowed,” exemplary claim language provided by the Examiner to overcome a particular rejection or to change claim interpretation has *not been addressed* with respect to other aspects of patentability (e.g. §101 patentable subject matter, §112 1st paragraph written description and enablement, §112 2nd paragraph indefiniteness, and §102 and §103 prior art).

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

29. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAMON OBEID whose telephone number is (571)270-1813. The examiner can normally be reached on Mon-Fri 9:30 AM- 6:00 PM.

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew J. Fischer can be reached on (571) 272-6779. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mamon Obeid
Examiner
Art Unit: 3621
March 4, 2009

/ANDREW J. FISCHER/
Supervisory Patent Examiner, Art Unit 3621